UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,960	01/25/2002	Sridhar Gurivireddy	135920/ATL-2001-010	3892

24587 7590 12/14/2005

ALCATEL USA
INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER	
YANG, LINA	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/056,960	Applicant(s) GURIVIREDDY ET AL.	
	Examiner Lina Yang	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/25/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Applicant is advised that should claim 18 be found allowable, claim 19 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

2. Claim 1 line 8 recites " said Internet means" should be replaced by "said Internet ***IP*** means". Proper correction is required.

3. Claim 2 line 3, the term "MN" should be defined as what it stands for.

Claim Rejections - 35 USC § 112

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the word "means" is preceded by the words "home agent, Internet IP, network paging protocol and wireless device" in an attempt to use a

"means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 1 also failed to specify the correlation functions of different "means", as they acting together to form a system.

5. Claims 11-20 and 21-30 are rejected under 35 U.S.C. 112, second paragraph for being hybrid claims.

Claims 11 and 21 claim both method steps for a method and means for an apparatus, and thus, render both claims vague and indefinite since it is unclear as to whether a method or an apparatus is intended to be the claimed invention.

Regarding claim 11-20 and 21-30, due to the nature of 35 U.S.C. 112 second paragraph issue as indicated above, no prior art rejection can be applied at this time

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 31 is rejected under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter: "encoded propagated signal data stream".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by La Porta et al. (U.S. Patent Application Publication No. 20020046287 A1).

Regarding claim 1, La Porta teaches a network paging system (Domain paging system in fig. 4) comprising:

(a) home agent means ("Home Agent HA");

(b) Internet IP means (domain router R1; other routers R2 and R3);

(c) network paging protocol means (HA , R1-R3, BS1-BS2 and Mobile host);

(d) wireless device means (Mobile host);

wherein said home agent means communicates with said wireless device means via said Internet means (domain router R1; other routers R2 and R3) under supervision of said network paging protocol means (paragraphs [0046]-[0047] and [0052]); and

said Internet IP means further comprises one or more Main Access Routers, Routers, and/or Base Station Routers (domain router R1; other routers R2 and R3).

Regarding claim 3, La Porta further teaches that the network paging protocol means is implemented via an Application Programming Interface (API) ([0064]).

Regarding claim 5, La Porta further teaches that the home agent means is also a wireless device means (usually it's a base station; [0034]).

Regarding claim 6, La Porta further teaches that the network paging protocol means is distributed in software operating on main access routers, routers, and base station routers (fig. 5; [0064]).

Regarding claim 7, La Porta further teaches that the communication in the network paging system occurs over the Internet (through domain router in fig. 4; the domain involves "Internet"; [0045]).

Regarding claim 8, La Porta further teaches that one or more components of the system is implemented on a personal computer (PC) ([0064]).

Regarding claim 9. La Porta further teaches that one or more components of the system is implemented on a wireless radio transceiver (inherently for mobile station).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2, 4 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Porta et al. (U.S. Patent Application Publication No. 20020046287 A1) in view of Billstrom et al. (U. S. Patent No. 5,590,133).

Regarding claim 2, La Porta teaches that the network paging protocol means further comprises:

(a) MN Paged triggering means ("the mobile host is paged" message 3 in fig. 4);

(b) New Paging Area triggering means (when in the standby state, the mobile host updates the network when the host links with a base station of a different paging area; paragraph [0030]);

(d) Dormant MN Reachable triggering means (response triggered message 4 in fig. 4; [0052]);

e) Dormant MN Not Reachable triggering means ("no response from the host; [0059]); and

wherein said triggering means augment Mobile IP communication protocols to notify said MN and/or an Access Router (AR) based on the network availability and status of said MN ([0052]).

La Porta differs from the claimed invention in that La Porta does not specifically teach that the network paging protocol means further comprises (c) New Paging Mode triggering means. However, in the similar filed of endeavor, Billstrom teaches that a mobile station informs a PD controller (router) its current paging mode (normal/sleep col. 10 lines 31) by sending a mode indicator every time it changes paging mode (col. 11 lines 59-62). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include New Paging Mode triggering, as taught by Billstrom in the assembly of La Porta in order to notify the system about the mode change.

Regarding claim 4, La Porta further teaches that the triggering means is implemented via an Application Programming Interface (API) ([0064]).

Regarding claim 31, La Porta teaches a network paging encoded propagated signal data stream constructed using:

(a) MN Paged triggering signal structure means ("the mobile host is paged" message 3 in fig. 4);

(b) New Paging Area triggering signal structure means (when in the standby state, the mobile host updates the network when the host links with a base station of a different paging area; paragraph [0030]);

(d) Dormant MN Reachable triggering signal structure means (response triggered message 4 in fig. 4; [0052]);

e) Dormant MN Not Reachable triggering signal structure means ("no response from the host; [0059]); and

wherein said signal is at least partially communicated via wireless communication means (through Mobile station and base station in fig. 4) ; and

said encoded signal communicates between two nodes in a distributed network over the Internet (example, from HA to MS through the domain router R1 in fig. 4).

La Porta differs from the claimed invention in that La Porta does not specifically teach that the network paging protocol means further comprises (c) New Paging Mode signal structure triggering means. However, in the similar filed of endeavor, Billstrom teaches that a mobile station informs a PD controller (router) its current paging mode (normal/sleep col. 10 lines 31) by sending a mode indicator every time it changes paging mode (col. 11 lines 59-62). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include New Paging Mode signal structure triggering, as taught by Billstrom in the assembly of La Porta in order to notify the system about the mode change.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Funato et al. (U.S. Patent Application Publication No. 20030143999 A1) discloses a method to locate a dormant mode Mobile Host (fig. 1; [0038], [0041]).

Grech et al. (U.S. Patent Application Publication No. 20040213181 A1) discloses a method and system for managing data flow between mobile nodes, access routers and peer nodes.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 7:30 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY

ALPUS H. HSU
PRIMARY EXAMINER